an energy delivery device including a proximal portion and a coaxial distal portion with blunt periphery guidable and positionable in contact with a surface of the selected site without penetrating the surface of the selected site and configured to deliver sufficient energy to the selected site without penetrating the surface of the selected site and configured to deliver sufficient energy to the selected site to effect a contraction in at least a portion of the selected site of the collagen containing tissue, the coaxial distal portion coaxial with the proximal portion;

a sensor positioned [at] in an interior of the distal portion of the energy delivery device to detect a thermal energy from the selected site and from the fluid medium, the sensor producing a thermal feedback signal which represents a composite of the thermal energy detected from the selected site of a collagen containing tissue and from the fluid medium; and

a feedback control system coupled to the sensor and configured to receive the thermal feedback signal and adjust a level of energy delivered to at least the portion of the selected site of the collagen containing tissue.

2. The apparatus of claim 1, wherein the energy delivery device is constructed from platinum.

3. The apparatus of claim 1, wherein the energy delivery device is constructed from stainless steel.

4. The apparatus of claim 1, wherein the energy delivery device is constructed from memory metal.

5. The apparatus of claim 1, wherein the energy delivery device is a composite construction.

6. The apparatus of claim 5, wherein a component of the composite construction does not conduct energy delivered by the energy delivery device.

7. The apparatus of claim 1, wherein the energy delivery device is an RF energy delivery device coupled to an RF energy source.

8. The apparatus of claim 1, wherein the energy delivery device is a resistive heating element coupled to a resistive heating source.

9. The apparatus of claim 1, wherein the energy delivery device is a microwave probe coupled to a microwave source.

10. The apparatus of claim 1, wherein the sensor is a thermocouple.

11. The apparatus of claim 1, wherein the sensor is a thermistor.

12. The apparatus of claim 1, wherein the sensor is a fiber optic.

13. The apparatus of claim 1, further comprising:

a handle coupled to the proximal portion of the energy delivery device.

14. The apparatus of claim 1, further comprising:

an electrical insulator positioned at least partially around an exterior surface of the energy delivery device.

15. The apparatus of claim 1, further comprising:

a thermal insulator positioned at least partially around an exterior surface of the energy delivery device.

16. The apparatus of claim 1, further comprising:

an electrical insulator positioned at least partially around an exterior surface of the energy delivery device; and

a thermal insulator positioned at least partially around an exterior surface of the energy delivery device.

17. The apparatus of claim 1, further comprising:

a thermally insulating material coupling the sensor to an exterior surface of the distal portion.

18. The apparatus of claim 1, further comprising:

a thermally conductive material coupling the sensor to an exterior surface of the distal portion.

19. The apparatus of claim 1, wherein the sensor is positioned to detect a thermal energy from substantially only the selected site of the collagen containing tissue.

20. The apparatus of claim 1, further comprising a second sensor.

21. The apparatus of claim 1, wherein the sensor is a band at least partially positioned on an exterior surface of the distal portion.

22. The apparatus of claim 1, wherein the sensor is positioned in an interior of the distal portion of the energy delivery device.

23. The apparatus of claim 1, wherein the sensor is a positioned on an exterior surface of the distal portion and extends to an interior of the distal portion.

24. The apparatus of claim 1, wherein the distal portion is steerable.

25. The apparatus of claim 1, wherein at least a portion of the energy delivery device is configured to be introduced through an operating cannula.

26. The apparatus of claim 1, wherein at least a portion of the distal portion is hollow.

27. The apparatus of claim 26, wherein the distal portion has a substantially uniform wall thickness.

28. (Amended) An apparatus for contracting collagen fibers in a selected site of a collagen containing tissue which is adjacent to a fluid medium, comprising:

an energy delivery device including a proximal portion and a coaxial distal portion configured to be guided and positioned at an interface between the fluid medium and the selected site and to provide a selected thermal distribution in the selected site and effect a controllable contraction of at least a portion of the selected site of the collagen containing tissue, the coaxial distal portion coaxial with the proximal portion;

a sensor positioned [at] in an interior of the distal portion of the energy delivery device to detect a thermal energy from the selected site and from the fluid medium, the sensor producing a thermal feedback signal which represents a composite of the thermal energy detected from the selected site of a collagen containing tissue and from the fluid medium; and

a feedback control system coupled to the sensor, wherein a position of the sensor, a geometry of the distal portion of the energy delivery device and the feedback control system provide a controllable energy delivery to the selected site of the collagen containing tissue.

29. (Amended) An apparatus for contracting collagen fibers in a selected site of a collagen containing tissue which is adjacent to a fluid medium, comprising:

an energy delivery device including a proximal portion and a coaxial distal portion with a blunt periphery guidable and positionable in contact with a surface of the selected site without penetrating the surface of the selected site and configured to provide a selected thermal distribution in the selected site and effect a controllable contraction of at least a portion of the selected site of the collagen containing tissue, the coaxial distal portion coaxial with the proximal portion;

a sensor positioned [at] in an interior of the distal portion of the energy delivery device to detect a thermal energy from the selected site and from the fluid medium, the sensor producing a thermal feedback signal which represents a composite of the thermal energy detected from the selected site of a collagen containing tissue and from the fluid medium; and

a feedback control system coupled to the sensor, wherein a position of the sensor, a geometry of the distal portion of the energy delivery device and the feedback control system provide a controllable energy delivery to the selected site of the collagen containing tissue.

REMARKS

Favorable reconsideration of this application is requested in view of the foregoing amendments and the following remarks. Claims 1-29 are pending.

Support for the recitation that the sensors positioned in an interior of the distal portion is found at lines 1-3 of page 13 of the specification as originally filed. The amendment does not add new matter.

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claims 1, 28 and 29 are amended to specify that the coaxial distal portion is co-axial with the proximal portion.

The coaxial arrangement can be appreciated from the figures forming part of this application. The term coaxial can be defined as having a common axis or coincident axis. For an example of a non-coaxial arrangement, the Examiner is referred to the Makower and Ishihara references where the laser tip/probe diverges at an acute angle as discussed below in more detail.

Accordingly, withdrawal of this rejection is respectfully requested.